

Lesson Plan 2

	Page
Overview	2-1
Learning Objectives	2-1
Vocabulary	2-1
Materials Needed	2-1
Getting Started	2-1
Development	2-2
Activity 1 - "Know Your Farm"	
Exercise 1 - "Matching"	2-4
Exercise 2 - "Word Search"	2-5
Activity 2 - "Maze"	2-6
Activity 3 - "Alphabetizing and Production by State"	2-7
Answer Sheet for Activity 1 (Exercises 1 & 2)	2-8
Answer Sheet for Activity 2 "Maze"	2-9
Answer Sheet for Activity 3 "Alphabetizing and Production by State"	2-10

Overview

The purpose of these activities is to introduce students to the definitions and concepts of the census of agriculture, familiarize them with the geography of the Nation's map by showing major areas of where different crops and livestock are produced in the United States, and show the students what crops or livestock are prominent in their State.

Also, students learn the difference between the concepts of complete count and undercount by participating in a role playing activity.

- **Suggested grades 3-6**
- **Suggested time 2 Days**

Learning Objectives

Students will:

1. Define many terms that are used in the census of agriculture and become more familiar with them through word association

2. Solve the maze and help the report form find its way to the mailbox in order to get a complete count, not an undercount
3. Become more familiar with the U.S. map and where different crops and livestock are produced. This activity will also increase their *alphabetizing* skills by putting the States in the correct order
4. Explain the difference between the terms, "complete count" and "undercount"
5. Use a simple example to show how an undercount can adversely affect the results of the census.

Vocabulary

(See Glossary of Census Terms in the Introduction for definitions)

Census
Land in farms
Farm
Operator

Complete count
Undercount

Materials Needed

Copies of Activity 1, Activity 2, and Activity 3 Handouts

Index cards or small pieces of paper

Getting Started

1. Introduce this lesson by having a discussion of the vocabulary. Tell the students they are going to be learning some important words. Begin with the word **Census**. Write it on the chalkboard. Ask the students if they know the meaning of the word. Tell them a census is a count.
2. On the board write the word **Agriculture** (Ag-ri-cul-ture) in syllables just to the left of the word **Census**. Have the students pronounce the word. Ask them the meaning of this word. Ask the students for ideas on what information they

think the census of agriculture collects.

3. Have the students complete the Activity 1 Handout by matching the products with the animal or plant that they came from. Also have them complete the Activity 1, Exercise 2 Handout to help them become more familiar with agriculture census-related words.
4. As a fun exercise, have the students solve the maze on the Activity 2 Handout to help the completed report form find its way to the mailbox and not to a place where it will be forgotten. Stress the importance of a complete count; not undercount in the census.
5. Before looking at the Activity 3 Handout, have the students guess what type of agricultural activity might be found in each of the 50 States. Then use the Activity 3 Handout to help familiarize the students with the U.S. map and where different crops and livestock are produced. Have the students alphabetize the States and specify what type of agricultural production each State is known for by looking at the map.
6. Write the words **Complete Count** and **Undercount** on the chalkboard. Ask the students if they can explain what these census terms mean. As a hint, tell them they are the opposite of each other. Tell them that complete count means that every farm, crop, livestock, piece of machinery and equipment, etc., in their neighborhood and in the entire Nation is counted in a

census of agriculture. Tell them that undercount means that some of the farms were not counted. This also means that some of the other counts, like crops or livestock, are missing too.

7. Ask the students what they think might happen if there is not a complete count in the agriculture census. As a followup question, ask why an agriculture census is taken in this country.

Answer: A census is taken to determine totals of farms, land in farms, crops, livestock, machinery and equipment, operators, and other characteristics. These totals are then used by Federal, State, and local governments to analyze and develop policies on land use, water use and irrigation, rural development, and farmland assessment; farm organizations use the data to formulate future farm programs and policies which affect farmers and ranchers; Congress and State legislators use the census data to evaluate potential farm legislation; rural electric companies use the data to forecast future energy needs for farms, ranches, and their communities; agribusinesses use the data to develop sales territories and to determine the most effective locations for retail outlets to better serve farmers and ranchers; and the U.S. Department of Agriculture uses the data to prepare estimates of farm income and cost of production, to plan for emergency operations during drought and outbreaks of diseases or infestations of pests,

and to evaluate legislation and agricultural programs.

Development

1. Tell the students they are going to participate in an activity that will show them exactly how census totals are used in making decisions and what happens if there is an undercount.

Have the students imagine that their classroom is a county. Have them name it, for instance **Farm Town**. Tell them that a big, national agriculture-supply store is trying to decide on the kind of inventory they want to stock. The president of the company is waiting for the new census totals for **Farm Town** to help him/her decide on the inventory.

2. Tell the students they are now going to take an agriculture census of **Farm Town** and will give the total to the president of the agriculture-supply store. Their census will give a count of crops (for girls) and livestock (for boys). (Distribute the index cards.) Tell the students that they are going to create their own farm by writing down their inventory for their farm.

Before they do, tell the girls that they produced all the crops in **Farm Town** and the boys that they raised all the livestock. Tell the boys that they think a census is a dumb idea and a waste of time. They do not care if they are counted. They do not see the reason why. Instruct the boys to write words like **refused**, **don't care**, or **gone fishing**, on their cards and leave them

blank. Make sure the girls write the information for their farms. Collect all of the cards.

3. On the chalkboard write the phrase, **Census of Agriculture Farm Town**. Below that, write the words **Crops** and **Livestock**. Write the number of crops and livestock for the farms. Tally the returns. There should be no tally marks and a zero (0) entered in the column **Livestock**.
4. Transfer the counts on the board to a separate piece of paper with an official heading—**Official Report From The Census of Agriculture**. (Prepare this sheet ahead of time.) Announce, as the census taker, "The Agriculture Census of **Farm Town** is over. The final counts, which will not be changed for 5 years, are crops _____ and livestock 0.
5. Now, change roles. Become the president of the agriculture supply store in a far distant city. Seat yourself at your

desk, and pick up the **Official Report**. Say "Oh Great! The **Official Report** from the Census of Agriculture for **Farm Town** has just arrived. I have been waiting for this. This says that **Farm Town** only has crops and **No** livestock. From this report, I know exactly what to stock in my store—fertilizer, seeds, etc. There is no need to stock feed, medicine, or anything else for livestock because **Farm Town** did not report any. Therefore, they must not have any."

6. Assume your role as teacher. Ask the students for their reaction to the president's decision. Direct the students now to imagine it is several weeks or months in the future. Tell them that the president of the company has been receiving complaints about the new store in the county of **Farm Town**. The livestock in **Farm Town** are dying because of the lack of food and medicine.

7. Ask the students to explain what happened. Tell them that because the boys did not answer the census, there was an undercount. The president of the company did not know this and used the census totals to make a decision that affected the livestock in **Farm Town**.

Because of the undercount, the boys in **Farm Town** lost their livestock to sickness and starvation. If only the boys had taken the time to fill out their census report forms, the supply store would have carried the necessary items that they needed to keep their livestock alive. Tell the students the same kinds of things can happen in real agriculture censuses. If there is an undercount, someone loses out. This is why it is important that every farmer and rancher participate in the census of agriculture.

Lesson Plan 2
Activity 1 - Handout

Exercise 1



Matching

Match the products in column 1 with the animal or crop that they came from in column 2. The items in column 2 may be used more than once.

Column 1

1. bacon _____
2. milk _____
3. spaghetti sauce _____
4. egg _____
5. cornmeal _____
6. peanut butter _____
7. pork chops _____
8. flour _____
9. beef _____
10. cigarettes _____
11. wool sweaters _____
12. french fries _____
13. t-shirts _____

Column 2

- a. chicken
- b. cow
- c. pig
- d. corn
- e. tobacco
- f. wheat
- g. cotton
- h. potatoes
- i. sheep
- j. peanuts
- k. tomatoes

Lesson Plan 2
Activity 1 - Handout

Exercise 2



Word Search

Find the following words in the word search puzzle below. Circle each word that you are able to find. Words may be found forward and backward (horizontally, vertically, and diagonally).

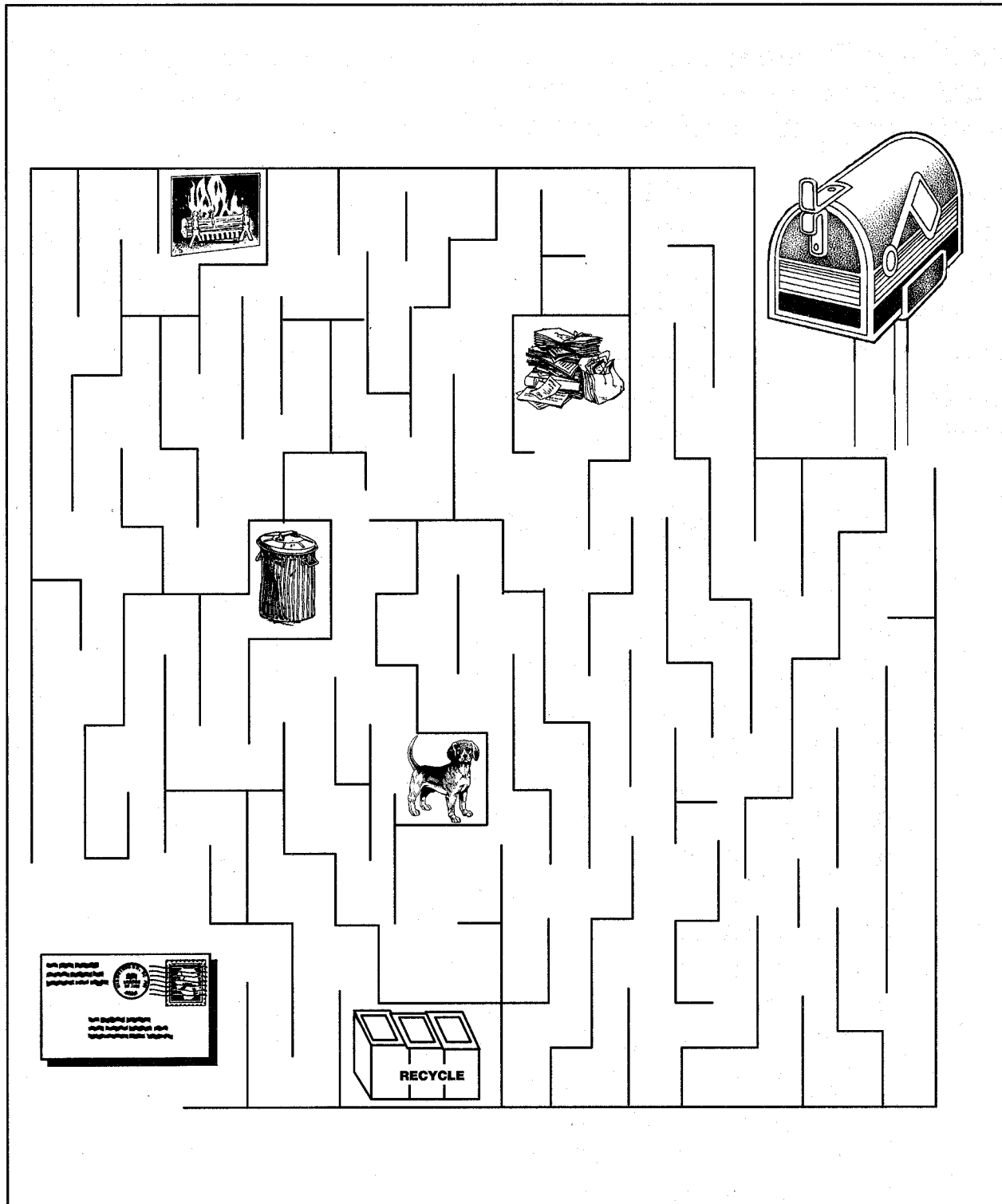
census	soybeans	pig	cornmeal
farm	wheat	barley	sunflower
report form	corn	sorghum	beef
complete count	cotton	orchards	egg
undercount	tobacco	potatoes	milk
operator	chicken	vegetables	oil
sheep	cow	flour	pork

WORD SEARCH PUZZLE

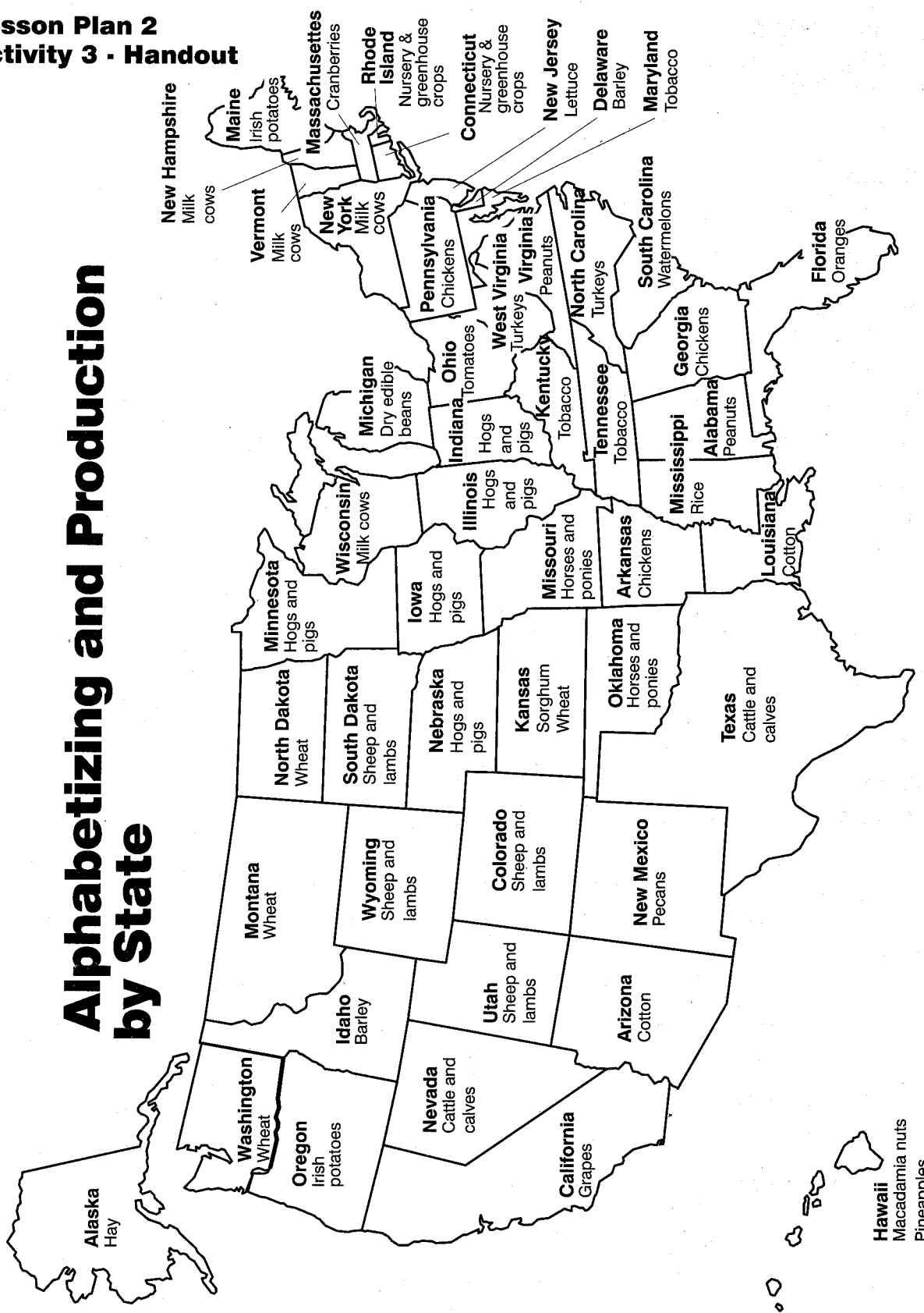
c o m p l e t e c o u n t a s
c o t t o n x y s h e e p z o
o e c v e g e t a b l e s b y
r r n d e f g w h i p l m r b
n e t s u n f l o w e r q u e
m p u r u x l i s c w a v n a
e o m s y s o r g h u m s d n
a r l d s b u r h i e f e e s
l t k r f a r m d c g c o r n
z f v a q a z u c k m f t c l
r o w h e a t l b e e f a o p
u r t c p k o k a n n o t u q
f m y r r a b b r j e o o n g
n g n o z i a c l d g l p t g
y x p i g k c p e u i o g n e
j h w l x l c i y m k l i m s
w v e d c b o p e r a t o r r

Lesson Plan 2
Activity 2 - Handout

Maze



Lesson Plan 2
Activity 3 - Handout



Lesson Plan 2

Activity 1

Answer Sheet

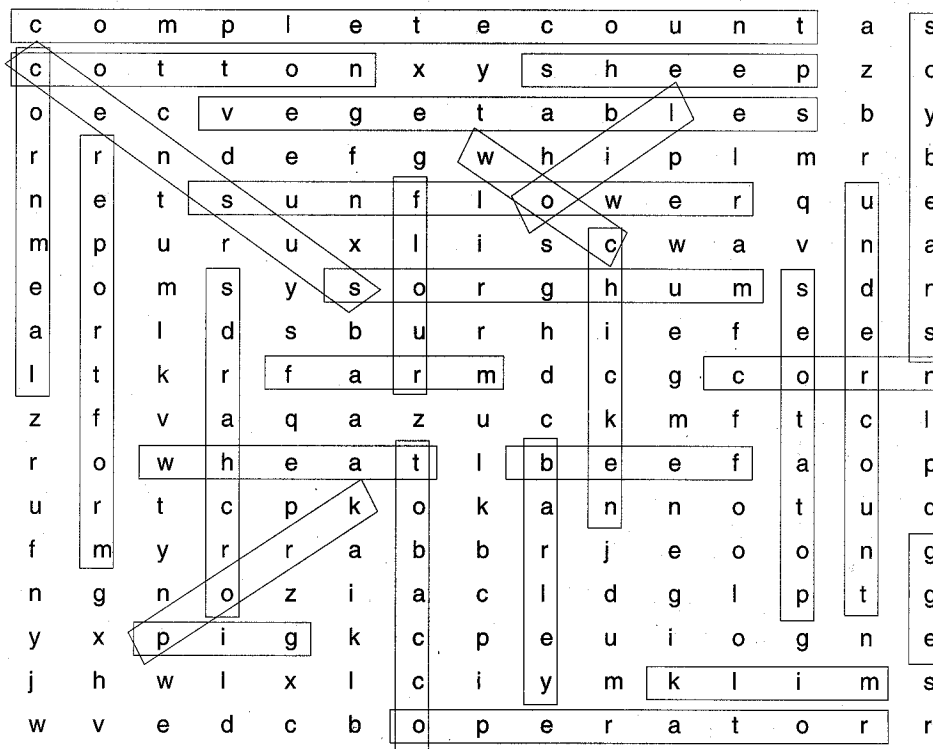
Exercise 1

Matching

1. c
2. b
3. k
4. a
5. d
6. j
7. c
8. f
9. b
10. e
11. i
12. h
13. g

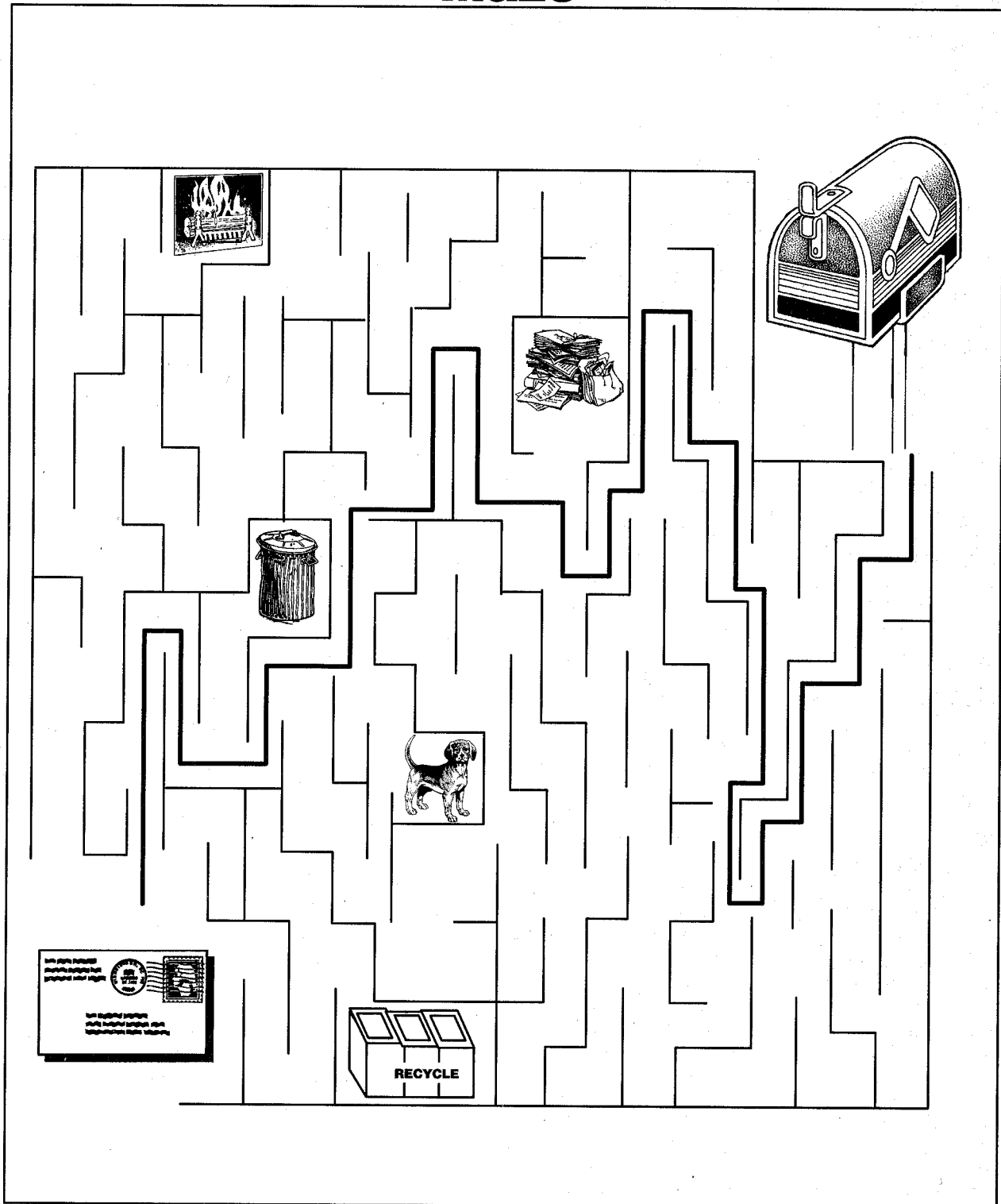
Exercise 2

Word Search



Lesson Plan 2
Activity 2
Answer Sheet

Maze



Lesson Plan 2
Activity 3
Answer Sheet

Alphabetizing and Production by State

- | | |
|--------------------|-------------------------------|
| 1. Alabama | -Peanuts |
| 2. Alaska | -Hay |
| 3. Arizona | -Cotton |
| 4. Arkansas | -Chickens |
| 5. California | -Grapes |
| 6. Colorado | -Sheep and Lambs |
| 7. Connecticut | -Nursery and greenhouse crops |
| 8. Delaware | -Barley |
| 9. Florida | -Oranges |
| 10. Georgia | -Chickens |
| 11. Hawaii | -Macadamia Nuts, Pineapples |
| 12. Idaho | -Barley |
| 13. Illinois | -Hogs and Pigs |
| 14. Indiana | -Hogs and Pigs |
| 15. Iowa | -Hogs and Pigs |
| 16. Kansas | -Sorghum, Wheat |
| 17. Kentucky | -Tobacco |
| 18. Louisiana | -Cotton |
| 19. Maine | -Irish Potatoes |
| 20. Maryland | -Tobacco |
| 21. Massachusetts | -Cranberries |
| 22. Michigan | -Dry Edible Beans |
| 23. Minnesota | -Hogs and Pigs |
| 24. Mississippi | -Rice |
| 25. Missouri | -Horses and Ponies |
| 26. Montana | -Wheat |
| 27. Nebraska | -Hogs and Pigs |
| 28. Nevada | -Cattle and Calves |
| 29. New Hampshire | -Milk Cows |
| 30. New Jersey | -Lettuce |
| 31. New Mexico | -Pecans |
| 32. New York | -Milk Cows |
| 33. North Carolina | -Turkeys |
| 34. North Dakota | -Wheat |
| 35. Ohio | -Tomatoes |
| 36. Oklahoma | -Horses and Ponies |
| 37. Oregon | -Irish Potatoes |
| 38. Pennsylvania | -Chickens |
| 39. Rhode Island | -Nursery and greenhouse crops |
| 40. South Carolina | -Watermelons |
| 41. South Dakota | -Sheep and Lambs |
| 42. Tennessee | -Tobacco |
| 43. Texas | -Cattle and Calves |
| 44. Utah | -Sheep and Lambs |
| 45. Vermont | -Milk Cows |
| 46. Virginia | -Peanuts |
| 47. Washington | -Wheat |
| 48. West Virginia | -Turkeys |
| 49. Wisconsin | -Milk Cows |
| 50. Wyoming | -Sheep and Lambs |